

CLAIMS

What is claimed is:

1. A swash plate-type compressor comprising:
a rotatable swash plate;
a piston is connected to said swash plate via at least one shoe and reciprocates in company with each rotation of said swash plate; and
wherein said swash plate comprises a layer of a sintered metal impregnated with a resin on at least a swash plate surface sliding against said at least one shoe, and a surface of said layer is ground.
2. A swash plate-type compressor of claim 1, wherein said metal is selected from the group consisting of a copper alloy and an aluminum alloy.
3. A swash plate-type compressor of claim 2, wherein said metal is added a solid lubricant is added to said metal.
4. A swash plate-type compressor of claim 3, wherein said solid lubricant is graphite.
5. A swash plate-type compressor of claim 3, wherein said solid lubricant is molybdenum disulfide.
6. A swash plate-type compressor of claim 3, wherein said solid lubricant is tungsten disulfide.
7. A swash plate-type compressor of claim 3, wherein said solid lubricant is boron nitride.
8. A swash plate-type compressor of claim 3, wherein said solid lubricant is antimony oxide.
9. A swash plate-type compressor of claim 3, wherein said solid lubricant is indium.
10. A swash plate-type compressor of claim 3, wherein said solid lubricant is stannum.
11. A swash plate-type compressor of claim 3, wherein said solid lubricant is argentum.
12. A swash plate-type compressor of claim 3, wherein said solid lubricant is plumbum.
13. A swash plate-type compressor of claim 1, wherein said resin is a thermoplastic resin.
14. A swash plate-type compressor of claim 1, wherein said resin is a thermosetting resin.
15. A swash plate-type compressor of claim 1, wherein said resin is an epoxy resin.
16. A swash plate-type compressor of claim 1, wherein said resin is a phenol resin.
17. A swash plate-type compressor of claim 1, wherein said resin is a polyimideamide resin.

18. A swash plate-type compressor of claim 1, wherein said resin is a polyimide resin.
19. A swash plate-type compressor of claim 1, wherein said resin is a polyetheretherketone resin.
20. A swash plate-type compressor of claim 1, wherein said resin is added a solid lubricant is added to said resin.
21. A swash plate-type compressor of claim 20, wherein said solid lubricant is polytetrafluoroethylene resin.
22. A swash plate-type compressor of claim 20, wherein said solid lubricant is graphite.
23. A swash plate-type compressor of claim 20, wherein said solid lubricant is molybdenum disulfide.
24. A swash plate-type compressor of claim 20, wherein said solid lubricant is tungsten disulfide.
25. A swash plate-type compressor of claim 20, wherein said solid lubricant is boron nitride.
26. A swash plate-type compressor of claim 20, wherein said solid lubricant is antimony oxide.
27. A swash plate-type compressor of claim 20, wherein said solid lubricant is indium.
28. A swash plate-type compressor of claim 20, wherein said solid lubricant is stannum.
29. A swash plate-type compressor of claim 20, wherein said solid lubricant is argentum.
30. A swash plate-type compressor of claim 20, wherein said solid lubricant is plumbum.
31. A method for manufacturing a swash plate-type compressor, wherein said compressor comprises a rotatable swash plate and a piston, said piston is connected to said swash plate via at least one shoe and reciprocates in company with each rotation of said swash plate, said method comprising the steps of:
 - sintering a metal on said swash plate surface;
 - impregnating a resin into a layer of said sintered metal;
 - hardening said resin; and
 - grinding an outer surface of said impregnated layer.
32. The method of claim 31, further comprising the step of adding a solid lubricant to said layer.

33. The method of claim 31, further comprising the step of adding a solid lubricant to said resin.